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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|----------------|----------------------|-------------------------|-------------------------|--|
| 09/888,521 | 06/26/2001 | Andrew M. Volk | 2207/11504 | 1112 | |
| 23838 7: | 590 03/07/2005 | | EXAM | EXAMINER | |
| KENYON & KENYON | | | BUTLER, DENNIS | | |
| 1500 K STREET, N.W., SUITE 700 WASHINGTON, DC 20005 | | | ART UNIT | PAPER NUMBER | |
| | , | | 2115 | | |
| | | | DATE MAILED: 03/07/200: | DATE MAILED: 03/07/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|---|---|--|--|--|--|
| Office Action Summary | | 09/888,521 | VOLK, ANDREW M. | | | |
| | | Examiner | Art Unit | | | |
| | | Dennis M. Butler | 2115 | | | |
| Period fo | The MAILING DATE of this communication app r Reply | pears on the cover sheet with the c | orrespondence address | | | |
| THE N - Exten after 3 - If the - If NO - Failur Any re | DRTENED STATUTORY PERIOD FOR REPLIMALING DATE OF THIS COMMUNICATION. Is ions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a repliment period for reply is specified above, the maximum statutory period to the torophy within the set or extended period for reply will, by statute the ply received by the Office later than three months after the mailing dispatent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1)⊠ | 1)⊠ Responsive to communication(s) filed on <u>08 December 2004</u> . | | | | | |
| 2a)⊠ | This action is FINAL . 2b) ☐ This | action is non-final. | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition | on of Claims | | | | | |
| 5)⊠ 6)⊠ 7)□ | Claim(s) 1-5,7-21 and 24-31 is/are pending in 4a) Of the above claim(s) is/are withdraw Claim(s) 1-5,7-21 and 26-31 is/are allowed. Claim(s) 24 and 25 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o | wn from consideration. | | | | |
| Application | on Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) 🗌 🗆 | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| | nder 35 U.S.C. § 119 | | | | | |
| 12) <u></u> | Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau ee the attached detailed Office action for a list | s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)). | on No ed in this National Stage | | | |
| Amet - | | | | | | |
| Attachment(1) ⊠ Notice | (s) of References Cited (PTO-892) | 4) Interview Summary | (PT∩_413) | | | |
| 2) 🔲 Notice 3) 🔲 Inform | of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date | Paper No(s)/Mail Da | | | | |

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1. This action is in response to the amendment received on December 8, 2004.

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Claims 1-5, 7-21 and 24-31 are pending. Claim 31 has been added.

2. The text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.

3. Claims 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Kopser et al., U. S. Patent 6,629,250.

Per claim 24:

- A) Kopser et al teach the following claimed items:
- 1. a receiver interface (circuit #2) coupled to an interconnect comprising traces (transmission lines) having varying lengths with receiving circuit 12 and transmission lines 14, 16 and 18 of figure 1 and at column 3, lines 1-9;
- 2. a programmable delay element coupled to the receiver interface and delaying sampling of received signals of the receiver interface by a delay corresponding to the length of the trace with figure 2, at column 2, lines 15-24 and 38-43, at column 4, lines 5-18 and at column 6, line 66 column 7, line 12. Per claim 25:

Kopser describes the delay element comprises a plurality of multiplexers each coupled between a buffer (master latch 20) and a plurality of variable delay outputs (outputs of delay elements 32) with multiplexers 32 of figure 2, at column 2, lines 38-43 and at column 6, line 66 – column 7, line 12. Kopser describes a plurality of programmable registers to select one of the plurality of variable delay outputs in accordance with a length of a trace with select registers 34 of figure 2,

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at column 2, lines 38-43, at column 4, lines 35-37 and at column 6, line 66 – column 7, line 12.

4. Applicant's arguments filed on December 8, 2004 have been fully considered but they are not persuasive.

In the Remarks, applicant has argued in substance that:

- A. The delay circuit outputs a delayed signal; it does not delay sampling of a received signal as recited in independent claim 24.
- As to point A, the examiner disagrees with applicant's contention. Kopser shows 5. the delay circuit in figure 2. Kopser describes that the amount of delay is programmable on each transmission line in the receiving circuit and the timing for receiving the data at each of the input terminals of the second circuit (figure 1) can be controlled to ensure they have the same relation to each other as they had when the sending circuit transmitted the data at column 2, lines 38-43. Data signal on transmission line 14 of figure 2 is sampled by master latch 20 when the rising edge of the CKM signal is received at the clock input of master latch 20. The CKM signal is generated based on the output from the programmable delay circuit 26. Therefore, the output of the delay circuit determines when the data signal is sampled by master latch 20 and it clearly delays the sampling of the received data signal as claimed. Furthermore, figure 2 of Kopser substantially corresponds to figure 6 of the instant application. The phase shifted clocks output by the DLL of figure 6 correspond to the phase shifted clocks output by the delay elements 42 of figure 2. Multiplexers 602 of figure 6 correspond to multiplexers 30 of figure 2. Terminal 607 of figure 6 corresponds to terminal 17 of figure

- 1. Latch 605 of figure 6 corresponds to latch 20 of figure 2. Registers 603 of figure 6 correspond to registers 34 of figure 2.
- 6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 571-272-3663. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis M. Butlon Dennis M. Butler Primary Examiner Art Unit 2115